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ANNUAL INSECT CONTROL REPORT, DISTRICT 4

H.L. HEYWOOD
OGDEN, UTAH
OCTOBER 6, 1924

FILE COPY FOREST INSECT LABORATORY, STANFORD UNIVERSITY CALIFORNIA.

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UNITED STATES DEPARTMENT OF AGRICULTURE

FOREST SERVICE

INTERMOUNTAIN DISTRICT

Forest Service Building
Ogden, Utah

S
Insect Control, D-4

October 6, 1924.

The Forester,

Washington, D. C.

Dear Sir:

The insect conditions on the Ashley are about the same as last year; if any change it is for the better.

The Boise reports the spruce bud worm damage continuing but probably decreasing; brevicomis in yellow pine decreasing; and monticola in lodgepole increasing. Have talked with Evenden about possible control of monticola in lodgepole on the Boise but since it is scattered pretty much all over the Boise, Payette, Idaho and Challis, we decided that control measures are unwarranted, particularly since the attacks are mostly in the back country where there will be no demand for a great many years.

The Cache is handling its small infestations by sales and administrative use.

The Caribou reports a considerable infestation of the Douglas fir beetle but control measures are not recommended because this beetle has never been known to become really serious. The Supervisor also reports a serious infestation of monticola in lodgepole pine and recommends an allotment of $2500. This is not approved by this office at this time. Mr. Morse will get over the area this fall or winter and if control measures are thought necessary, further report and recommendations will be made.

On the Challis, monticola is scattered in small patches over large areas. No control recommended - see Boise, above.

The serious infestation of ponderosa in yellow pine on the Dixie seems to have run its course. The conditions are apparently the same as on the Powell (see Powell report attached).

The Fishlake has some ponderosa in yellow pine and spruce beetle in Engelmann spruce, but is handling them under administrative use.

The limber pine near Jarbidge on the Humboldt is suffering a severe attack by monticola. No control measures recommended.

The Idaho reports the pine butterfly attack is over and some scattered infestations of monticola in lodgepole in the back country (see Boise, above).

Kaibab - special report sent in.

The La Sal is holding the spruce bark beetle in North Canyon under control but it keeps bobbing up. Can't seem to absolutely stop it.

Lemhi - normal

Manti - considerable trouble with spruce bark beetle but will handle by administrative use.

Stewart on the Minidoka reports that the infestations of monticola in lodgepole are decreasing in most places. Has a few places where the infestations are on the increase. He asks for $100. This office recommends $200 because we believe his estimate too conservative.

Nevada - normal.

Payette - copy of report enclosed.

Powell - " " " "

Salmon - normal.

The Sawtooth reports considerable loss from spruce bud worm attacks but bark beetle infestations normal.

Targhee - normal.

Teton reports heavy spruce bud worm damage and two small epidemics of bark beetles controlled by administrative use.

The Uinta reports considerable spruce bud worm damage.

Wasatch - normal.

On the Weiser, the brevicomis infestation in yellow pine is reported to have about run its course and the estimated annual loss this year is less than one-half of one percent. The pine butterfly has practically disappeared and the loss from spruce bud worm is apparently considerably less than last year.

The Wyoming is normal.

Very truly yours,

R? H. RUTLEDGE, District Forester.

By R. E. GERY Acting

Encl.

COPY

PAYETTE NATIONAL FOREST

Cascade, Idaho

September 1, 1924.

S
Insect Control D-4
Payette

ANNUAL REPORT

Dendroctonous brevicomis:

No attacks of the epidemic stage have been noted on the Forest this year.

Dendroctonous monticola:

Practically all of the lodgepole pine stands on the Forest have been heavily hit by this bark-beetle the past year. Areas of from 1/8 to 1 acre in extent are scattered thruout all these stands. It is reported that areas on adjoining Forests are in the same predicament and no control measures are recommended except they involve these adjoining areas as well.

In connection with the above two pests, a trip was made to Peace Valley by Entomologist Evenden and Junior Forester Miles, in August of this year. There had been a heavy infestation in lodgepole pine on Silver Creek and it was feared that the D. Monticolae would spread to the yellow pine when the lodgepole pine was exhausted. Several bark-beetle killed yellow pine trees were found adjoining to this stand of lodgepole pine but upon examination it was found that they had been killed by the D. brevicomis. Mr. Evenden stated that the Bureau of Entomology has always claimed that D. monticolae which breeds for some time in lodgepole pine will not leave lodgepole pine even when the latter stand is exhausted and that their theory seemed to be borne out on this area. Accordingly no control measures for the protection of yellow pine would be justified at present.

Pine Butterfly:

The pine butterfly was heavily pasasitised last year and no butterflies developed this year. The loss from their attack the past several seasons is just beginning to show up and the loss is slight, in general.

Sawfly:

This pest has just shown up this year in a strip of lodgepole pine along the North Fork of the Payette River from Van Wyck to Arling. The larvae attacked and made about a 100% defoliation on this strip of lodgepole pine in June of this year. The larvae since then have dropped to the ground and the pupae are now in pupae-cases between the humus and the earth. The next generation will emerge next spring. The lodgepole pine has since recovered to a large extent, this years' buds giving a new crop of needles. This pest defoliated more severely than did the pine butterfly and Evenden reports that he has found specimens of this pest on the yellow pine in the near vicinity. It is feared that the yellow pine on the Dion Sale area may be hit by this pest, this area being only some four miles distant from the present infestation. No practical measures for control are known. However, it is recommended that as heavy a crop of young yellow pine as it is possible to leave, be left on this sale area and that no thinning be practised until the danger from this pest is over.

Ips beetles:

Ordinarily there is little danger from these so-called secondary beetles. However, there are at present in the woods on the area cut over last winter, 400,000 feet of yellow pine and Douglas fir sawlogs. These logs at present are alive with Ips beetles in various stages of development from larvae to adults about to emerge. There is certain to be a loss because of this in the trees of blackjack size. In fact, two clumps, one of two trees, and one of eight trees, have already been observed on this area, the needles turning yellow. It is proposed to use whatever money is left in the Cooperative Brush Disposal Fund of the Dion Sale after brush disposal this fall, to peel logs now in the woods, in case there prove to be sufficient numbers of Ips beetles in the logs at that time to make it worth while. It is also proposed to withhold thinning on this area until this epidemic has died down.

Spruce Budworm:

The attack of this pest is general over the Forest. It has attacked Douglas fir, alpine fir, white fir and spruce. Large numbers of trees of these species are killed, of all sizes and ages, and many more have had the tips of the branches killed and the trees dying. No control measures are known.

Respectfully submitted,

Clark Miles

Junior Forester.

COPY

POWELL NATIONAL FOREST

Widtsoe, Utah

S September 10, 1924.
Insect Control, D-4,
Powell

District Forester,

Ogden, Utah.

Dear Sir:

Enclosed herewith is Ranger Heywood's report on the beetle infestation along the course of the East Fork Creek.

As you know, the counts cover the number of trees killed in previous years, and in no way offers as a check on the 1924 attack. However, it is noted in every case that the trees attacked in 1923 (sorrell tops now) show a considerable decrease as compared with the number attacked in 1922.

On September 7 and 8, Rangers Heywood, Haycock and myself made a count of the four strips covered in 1923 for the purpose of securing information on the 1924 attack. Due to the fact, however, that insufficient blazing was done when the plots were established it was impossible to get a count on the exact trees counted in these cases last year. As a result, the numbers will not check with the figures as shown for 1923. On the strip established by S. S. Stewart, Rangers Heywood, Dyches and myself, which is two chains wide and one mile long, lying immediately north of the Tropic Reservoir, there were 11 sorrel tops and 4 trees still living that were attacked in 1923, making a total of 15 trees attacked that year compared with only two that had been attacked this year. This strip is located within a portion of the area examined by Mr. Edmonston in 1923.

On Plot No. 1 of the strips established last year by Rangers Heywood, Cox and Dyches, there was found only one tree attacked this year; 5 sorrel tops and 4 only partly dead that were attacked in 1923 making a total of 9 in 1923 as compared with one in 1924.

On Plot No. 2 there was found only one tree that has been attacked this year; 5 sorrel tops and 2 partly dead from the 1923 attack, making a total of 7 attacked in 1923 and only one for this strip in 1924.

On Plot No. 3 we counted 6 trees infested by the 1924 attack; 10 sorrel tops and 8 partly dead from the 1923 attack.

This indicates that 18 trees were infested by the 1923 attack as compared with 6 in 1924 for this strip.

As stated bevore, we were unable to follow the strips counted last year. However, the starting point was the same in each case and we followed as nearly as possible the strips counted last year. Each was two chains wide and a fairly accurate count of a strip that wide can be made by three men. For the location of the strips covered kindly refer to the map submitted with our "S-Insect Control" letter of December 24. You will note that for each of the strips counted there were a number of the trees attacked in 1923 that are only partly dead. This condition is found over the Forest wherever the infestation exists. While it is not certain that this indicates a weakened condition of the beetle, we feel that it probably is.

An examination of the trap trees at both the Syrett and Marshall mills shows conclusively that the beetles are on the decrease. Not to exceed 8 logs of the 20,000 feet cut for traps have been attacked, and there is but very little infestation in the timber available to these mills. Mr. Oldman, representative engineer of the U. P. Company, advised Ranger Heywood that in his observations, he had only located one infested tree on Section 36.

On July 2 Ranger Haycock and I rode through a portion of the Birch and Horse Creeks infestation on the Powell division, mentioned in my memorandum of September 19. At that time we counted only two sorrel tops and Ranger Haycock has observed no more since that time. An effort was also made by him to secure specimens of the beetle from this area to be placed on exhibit at the joint rangers' meeting to be held at Puffer Lake, and he advises that he was unable to locate a single tree that had been attacked this year. In view of the conditions found we feel confident that the infestation has run its course and that any control work other than that being carried on by the mill men under free administrative permit is not justified.

The spruce beetle is doing considerable damage over a large area on the Powell side. The timber, however, is inaccessible and will be for a long time to come. As a result, it is not felt that direct control work should be initiated for its eradication.

Very truly yours,

(Sgd) WALLACE M. RIDDLE

Forest Supervisor.

Enclosure.

(COPY)

POWELL-SEVIER NATIONAL FOREST

Daves Hollow Ranger Station

September 9, 1924.

REPORT ON INFESTATION OF WESTERN YELLOW PINE WITH BLACK HILLS BEETLE ON THE EAST FORK - ON THE EAST SIDE OF THE CREEK BOTTOM BETWEEN PODUNK AND EAST CREEK.

Counts were made August 22, 1924 from same locations as counts of 1921-1922-1923.

From north ridge of Balley Hollow to north ridge of Henderson Hollow:- 31 sorrel tops in 1921, 62 in 1922, and 231 in 1923 and 63 in 1924. Count taken while riding along road on west side of creek. No. 6 Binoculars used.

From south ridge of Henderson Hollow to North ridge of Engrum Hollow:- 72 sorrel tops in 1921, 146 trees in 1922, 162 trees in 1923 and 67 in 1924. Count taken from mouth of Badger. Binoculars used.

Between Engrum Hollow and Long Hollow, no trees counted in hollows:- 20 trees 1921, 30 trees in 1922, 45 trees in 1923 and 17 trees in 1924. Count taken from north ridge of spruce trees just north of Skunk Creek. Binoculars used.

Between Long Hollow and Bridge Hollow:- 82 trees in 1921, 155 trees in 1922 and 105 trees in 1923, and 27 in 1924. Count made from road at Dry Hollow between Skunk and Blubber creeks, with binoculars.

Between Bridge and Cougar Hollows:- 140 trees in 1921, 100 in 1922, and 34 in 1923, and 7 in 1924. Count made while riding along a long road. Binoculars not used.

Between Cougar and Oak, in Oak and even with mouth of Podunk:- 36 sorrel tops in 1921, 41 in 1922, 14 in 1923 and 6 in 1924. Count made while riding along the road.

The counts made the last two years show that the beetles are decidedly on the decrease.

Respectfully submitted

(Sgd) LELAND D. HEYWOOD,

Forest Ranger.